

DOCKET FILE COPY ORIGINAL

WILKES, ARTIS, HEDRICK & LANE

CHARTERED

ATTORNEYS AT LAW

SUITE 1100

1888 K STREET, N. W.

WASHINGTON, D. C. 20006-2897

(202) 457-7800

CABLE ADDRESS: WILAN  
FAX: 202-457-7814

ANNAPOLIS, MARYLAND  
BETHESDA, MARYLAND  
FAIRFAX, VIRGINIA  
GREENBELT, MARYLAND

ROBERT M. GURSS  
(202) 457-7329

December 5, 1997

RECEIVED

DEC 5 - 1997

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

BY HAND

EX PARTE OR LATE FILED

Magalie Roman Salas, Esq.  
Secretary  
Federal Communications Commission  
1919 M Street, NW, Room 222  
Washington, DC 20554

RE: MM Docket 87-268, WT Docket 96-86, ET Docket 97-157, CC Docket 94-102

Dear Ms. Salas:

This is to inform the Commission that representatives of the Association of Public-Safety Communications Officials-International, Inc. ("APCO") met with Chairman William Kennard and Ari Fitzgerald of his staff on December 5, 1997, to discuss public safety communications issues in general, and APCO's position in the above-referenced proceedings in particular, as such positions are set forth in comments previously submitted to the Commission and summarized in the attached document, a copy of which was provided during the meetings.

Please contact the undersigned should the Commission have any questions.

Respectfully submitted,

WILKES, ARTIS, HEDRICK & LANE,  
Chartered

By:

  
Robert M. Gurss

Counsel for APCO

cc: The Honorable William Kennard  
Ari Fitzgerald, Esq.

## **ASSOCIATION OF PUBLIC-SAFETY COMMUNICATIONS OFFICIALS- INTERNATIONAL (APCO)**

- APCO, founded in 1935, is a professional organization of over 13,000 individuals involved in the management and operation of police, fire, emergency medical, forestry conservation, highway maintenance, local government, and disaster relief communications systems. APCO members are involved with radio communications to and from public safety personnel in the field, as well as 9-1-1 centers (Public Safety Answering Points or PSAPs) that receive emergency calls from the public, and information service departments for state and local governments.
- APCO represents state and local government interests before the FCC on matters related to public safety communications.
- APCO is certified by the FCC as the exclusive frequency coordinator for the majority of radio frequencies allocated for public safety use. Frequency coordination involves working with applicants to select and recommend assignment of frequencies to avoid harmful interference and to maximize efficient spectrum utilization.
- Other APCO activities include sponsoring the nation's largest annual public safety communications conference and exhibition, developing and providing training programs for public safety personnel, publishing an award winning monthly publication covering public safety communications issues, and co-sponsoring Project 25, a digital equipment standards development process.

## **PUBLIC SAFETY RADIO COMMUNICATIONS**

### **KEY ELEMENTS:**

- Dispatching police, fire, EMS and other public safety personnel
- Communications among public safety personnel in the field
- Includes both voice and data
- While most communications are within a single public safety agency, there is a critical need for improved interoperability between agencies for both day-to-day operations and major emergencies.
- Increasing need for radio transmission of high speed, high resolution information such as fingerprints, mugshots, building diagrams, medical data.
- Most public safety communications must be over dedicated radio systems controlled by public safety agencies. Commercial radio systems do not provide adequate coverage, reliability, restoration, priority, and security for "mission critical" public safety communications. Public safety agencies are using commercial services increasingly for other non-mission critical operations, however.

## **PROBLEMS FACING PUBLIC SAFETY RADIO COMMUNICATIONS**

- Lack of sufficient frequencies, especially in and near metropolitan areas
- Need for improved “interoperability” between public safety agencies
- Need for spectrum to implement new communications technologies

## **PRINCIPAL PUBLIC SAFETY FREQUENCY ALLOCATIONS**

- 150-170 MHz (VHF “high band”)

Widely used throughout the nation

Superior propagation characteristics (requires fewer sites, good for remote areas)

Suffers from congestion with virtually no vacant channels

- 450-470 MHz (UHF)

Also widely used, but few channels left

- 470-512 MHz (UHF TV channels 14-20)

Allocated in 11 major metropolitan areas, but no channels left.

Allotment of “new” 12.5 kHz channels in dispute.

- 800 MHz

- Two “pools” of channels reserved for public safety
- Often used by large cities and counties for trunked systems
- 821 MHz frequencies subject to regional planning process
- Few channels left in populated areas
- Requires large number of sites, thus increasing cost and limiting use in expansive sparsely populated areas.

The FCC has adopted a “spectrum refarming” plan for frequencies below 512 MHz which divides channels in half, and then in half again. However, significant spectrum relief will not occur until current users convert to new equipment that can operate on narrower channels.

**PUBLIC SAFETY WIRELESS ADVISORY COMMITTEE  
(PSWAC)**

- Formed by FCC and NTIA to study public safety spectrum requirements
- Recommended three spectrum allocations by 2010:
  - 2.5 MHz for interoperability below 512 MHz
  - Approximately 25 MHz in short term to alleviate spectrum shortages (specific recommendation was for spectrum in TV channels 60-69)
  - An additional 70 MHz over the next 15 years
- New non-governmental committee established to make recommendations regarding implementation of PSWAC findings (National Public Safety Telecommunications Council or "NPSTC")

### **746-806 MHz (TV channels 60-69)**

- 1997 Budget Bill requires allocation of 24 MHz to public safety services by 12/31/97
- DTV allotment plan avoids use of channels 60-69, except for 15 allotments in Los Angeles and New York/Philadelphia areas.
- Currently approximately 90 analog TV allotments in channels 60-69
- FCC has proposed allocation of channels 63, 64, 68, and 69 for public safety (ET Docket 97-157)
- APCO supports eliminating DTV allotments on or adjacent to channels allocated for public safety and policies to facilitate rapid departure of analog stations from those channels. APCO also opposes recent broadcaster proposals to increase the number of DTV allotments in channels 60-69 (except insofar as the proposal would reduce the number of such allotments in Los Angeles)
- Separate proceeding to adopt service rules for public safety use of new spectrum (WT Docket 96-86)
  - Issues include amount of spectrum designated for interoperability, use of regional plans, role and selection of frequency coordinator, interference guidelines with incumbent broadcasters.

## **9-1-1 ISSUES**

- Public Safety Answering Points (PSAP) need to be able to identify the location of calls to 9-1-1 to permit rapid and accurate emergency response dispatch, and need a call-back number for verification and as a remedy for “dropped calls.” Such automatic location information (ALI) and automatic number information (ANI) are key elements of “Enhanced 9-1-1” which is available for most wireline 9-1-1 calls, but not for wireless calls.
- FCC order in CC Docket 94-102 requires wireless carriers to provide ALI and ANI for wireless calls within a specific time frame. The wireless industry, public safety organizations, state and local governments, and the FCC need to stay on schedule to ensure implementation of these rules.
- Wireless 9-1-1 calls from “non-validated” phones (e.g., those not signed up with any carrier) pose unique problems, especially in the absence of call-back capability. While many PSAPs want to receive every 9-1-1 call, regardless of its source, others believe that call-back capability is necessary to prevent fraud (e.g., with stolen phones) and other problems posed by non-validated phones. While APCO had supported providing PSAPs with a choice as to whether to receive such calls, we do not object at this time to the FCC’s recent decision to require wireless carriers to transmit “all 9-1-1 calls.” We also note that industry and consumer groups are still trying to determine whether it is feasible to provide call-back capability for non-validated phones.
- All wireless 9-1-1 calls from validated phones must go through. Calls must not be blocked and, to the extent feasible, calls should be diverted to other carriers when the callers “home carrier” does not provide an adequate signal. Whether or not this requires a rule that wireless 9-1-1 calls to go to the provider with the “strongest signal” involves technical issues requiring further study.
- The Commission must complete its pending proceeding (also CC Docket 90-102) to adopt rules to ensure Enhanced 9-1-1 capability for multi-line telephone systems (e.g., PBXs). Public safety and industry groups have forged a consensus position which is awaiting Commission consideration.



## **BACKGROUND ON APCO INSTITUTE**

APCO Institute is a not-for-profit subsidiary of APCO International. Our mission is to provide training and educational opportunities to the public safety communications community through the use of training materials, reference books and publications, and training courses. The Institute designs all of its own training courses, and solicits materials to meet the demands of its customers.

Institute courses focus on all aspects of telecommunications operations. Basic, advanced and instructor-level skills are taught in a variety of courses. The Institute also offers self-paced courses and certifies technical knowledge in the Radiotelephone Technician Testing Program. APCO institute has certified telecommunicators throughout the United States, Canada, and in other countries. Its courses are considered the leaders in public safety telecommunications training.

The Institute believes in making training accessible at an affordable price to all agencies, regardless of size. By offering Instructor Certification, the Institute helps local agencies control costs by allowing line-level training to occur within the agency. These certified instructors conduct training according to APCO Institute requirements, allowing the students that they teach to earn APCO Institute certification. APCO Institute has also forged new ground by offering training that is available over the World Wide Web. Classes are conducted entirely through the Web and email, linking students from all over the world in a "virtual classroom". This teaching strategy eliminates travel costs completely, making APCO training even more affordable.